lead and to a temperature stabilizer device for influencing the effective temperature profile in the treatment area. The electrode support and the electrode, or electrodes, are constructed for direct insertion into the body tissue, said insertion being channel forming. The temperature stabilizer device has a timed heating device for thermal support of the insertion.

**In the Claims**:

Amend claims 14, 15, 18 and 21 as follows:

14. (Twice Amended) An electrosurgery apparatus comprising:

an electrode carrier having a distal end;

at least one electrode on the electrode carrier;

an alternating current source conductively connected to the electrode by way of a cable providing alternating current flow to said at least one electrode;

a temperature control device for the electrode and the electrode carrier, wherein the electrode carrier is of a pointed configuration at its distal end; and

a fluid heater for heating the at least one electrode and the electrode carrier independent of the amplitude of the alternating current flowing through the at least one electrode.

15. (Twice Amended) An electrosurgery apparatus as set forth in claim 14 wherein the at least one electrode and the electrode carrier are heatable to a temperature of more than 30°C.

16. An electrosurgery apparatus as set forth in claim 15 wherein the at least one electrode and the electrode carrier are heatable to a temperature of more than 37°C.

17. An electrosurgery apparatus as set forth in claim 14, comprising:

a cavity in one of the at least one electrode and the electrode carrier; and

wherein the temperature control device includes a temperature-controllable fluid source which is in communication with one of the at least one electrode and the electrode carrier by way of a quantitative flow control device.

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18. (Twice Amended) An electrosurgery apparatus as set forth in claim 14 wherein one of the at least one electrode and the electrode carrier has a thermoelectric heating and cooling device.

19. An electrosurgery apparatus as set forth in claim 14, comprising an effective temperature profile control device which is coupled to the temperature control device.

20. An electrosurgery apparatus as set forth in claim 19 wherein the effective temperature profile control device is coupled to the alternating current source, for sending a control input for controlling the alternating current source.

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21. (Twice Amended) An electrosurgery apparatus as set forth in claim 19 or claim 20 wherein the effective temperature profile control device comprises an interactively programmable effective temperature profile calculation unit for determining simulated, time-dependent effective temperature profiles on the basis of parameters of a tissue and the electrode and assumed parameters of the alternating current source and the temperature control device, and for varying the assumed parameters to ascertain an optimized, time-dependent effective temperature profile.

22. An electrosurgery apparatus as set forth in claim 21, comprising at least one low-inertia temperature sensor connected to an input of the effective temperature profile control device and which can be arranged adjacent to one of the electrode and the electrode carrier.

23. An electrosurgery apparatus as set forth in claim 22 wherein the temperature sensor is connected to an input of the calculation unit and that the calculation unit comprises means for verification or correction of a simulated, time-dependent effective temperature profile on the basis of the measurement signal of the temperature sensor.

24. An electrosurgery apparatus as set forth in claim 14 wherein the effective temperature profile control device comprises:

means for storing and calling up the time-dependency of control signals; and

means for outputting control signals in accordance with a stored time-dependency.

25. An electrosurgery apparatus as set forth in claim 14 wherein the electrode carrier comprises a tubular element of electrically insulating material with a decreasing conical distal end, the conical distal end having a peripheral surface and an interior, on the peripheral surface of which is arranged the electrode and in the interior of which is arranged the temperature control device.

26. An electrosurgery apparatus as set forth in claim 14, comprising two electrodes on the electrode.